Problem/Question/Observation

Does light effect the growth of a plant?

Background Information: Photosynthesis is the changing of water and carbon dioxide into glucose and oxygen. The more water that a plant is given, the more oxygen that it will produce thus causing the plant to growth quicker.

Hypotheses:

General: Plants grow at different rates.

Directional: The green light caused the plant to grow the slowest.

Measurable:

Procedure:

1. Add desirable amount of soil, seeds and water to a plastic container.
2. Shine different color lights onto the bean seeds over the week long experiment.
3. Measure the height of the plant each day.
4. Write down the data collected.

Data:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Color of Light | 9/15 (initial day of planting) | 9/18 | 9/19 | 9/20 | 9/21 | 9/22 | 9/23 |
| White | 0 | .8 | 1.1 | 2.4 | 2.8 | 3.6 | 4.1 |
| Green | 0 | .5 | .8 | 1.0 | 1.2 | 1.5 | 1.8 |
| Red | 0 | .5 | .7 | .9 | 1.3 | 1.5 | 2.0 |
| Yellow | 0 | .7 | 1.0 | 1.5 | 1.8 | 2.4 | 2.9 |
| Blue | 0 | .7 | 1.3 | 2.0 | 3.4 | 4.3 | 5.2 |

Conclusion:

Looking at my data, I’d say that the green light had the least effect on the growth rate of the plant. We started off by placing the beans under different lights. Then we decided to measure how much the plant grew on a daily basis. The plant that was under the green light was growing the slowest for the whole week. Something that we could have done better was after we put the bean seeds in the plastic container we did not give the plant any food. We also only watered the plants when we felt the soil was dry because we did not want to over water them. Some plants were watered more often because we think the light dried them out.